IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
AT HUNTINGTON

OHIO VALLEY ENVIRONMENTAL
COALITION, WEST VIRGINIA
HIGHLANDS CONSERVANCY,
and SIERRA CLUB,

Plaintiffs,

v. CIVIL ACTION NO. 3:15-cv-04101

HOBET MINING, LLC

Defendant

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

INTRODUCTION

1. This is a citizen suit for declaratory and injunctive relief against Hobet Mining, LLC ("Hobet") for violations of the Federal Water Pollution Control Act, 33 U.S.C. § 1251 et seq. ("the Clean Water Act" or the "CWA"), and the Surface Mining Control and Reclamation Act, 30 U.S.C. § 1201 et seq. ("SMCRA") at its operations on the Hobet 21 mining complex, in and around the Mud River and its tributaries in Boone and Lincoln counties of West Virginia.

2. As detailed below, Plaintiffs allege that Hobet has discharged and continues to discharge pollutants into waters of the United States in violation of Section 301 of the Clean Water Act, 33 U.S.C. § 1311, and the conditions and limitations of its West Virginia/National Pollution Elimination System ("WV/NPDES") Permits, WV0099392, WV1016776, WV1020889 and WV1022890, issued pursuant to Section 402 of the Clean Water Act.

3. Plaintiffs further allege that Hobet's discharges of unlawful quantities of pollutants into waters of the Mud River and its tributaries as well as mining practices on the Hobet 21 complex, violate the performance standards under SMCRA and the terms and conditions of surface mining permits S32-85, S5026-89, S5080-88, S5003-96, S5002-03, and S5016-92.

JURISDICTION AND VENUE

4. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 (federal question), 33 U.S.C. § 1365 (CWA citizen's suit provision), and 30 U.S.C. § 1270 (SMCRA citizen's suit provision).

5. On December 10, 2014, Plaintiffs gave notice of the violations and its intent to file suit to the Defendant, the United States Environmental Protection Agency ("EPA"), the Office of Surface Mining Reclamation and Enforcement ("OSMRE") and the West Virginia Department of Environmental Protection ("WVDEP"), as required by Section 505(b)(1)(A) of the CWA, 33 U.S.C. § 1365(b)(1)(A), Section 520(b)(1)(A) of SMCRA, 30 U.S.C. § 1270(b)(1)(A).

6. More than sixty days have passed since Plaintiffs sent their notice. EPA, OSMRE, and/or WVDEP have neither commenced nor diligently prosecuted a civil penalty or criminal action to redress the violations. Moreover, neither EPA nor WVDEP commenced an administrative penalty action under Section 309(g) of the CWA, 33 U.S.C. § 1319(g) or a comparable state law to redress the violations.

7. Venue in this District of proper pursuant to 33 U.S.C § 1365(c)(1) because the sources of the Clean Water Act violations are located in this District, and pursuant to 30 U.S.C. § 1270(c) because the coal mining operations complained of are located in this District.

8.

PARTIES

9. Hobet is a West Virginia Limited Liability Company engaged in the business of mining coal.

10. Hobet is a person within the meaning of Section 502(5) of the Clean Water Act, 33 U.S.C. § 1362(5) and Section 701(19) of SMCRA, 30 U.S.C. § 1291(19).

11. At all relevant times Hobet has owned and operated mines on the Hobet 21 complex in Boone and Lincoln counties of West Virginia, subject to WV/NPDES permits WV0099392, WV1016776, WV1020889 and WV1022890 and SMCRA permits S32-85, S5026-89, S5080-88, S5003-96, S5002-03, and S5016-92. These mines discharge pollutants into the Mud River and its tributaries, including, Lukey Fork, Ballard Fork, Berry Branch, Sugartree Branch and Stanley Fork.

12. Plaintiff Ohio Valley Environmental Coalition is a nonprofit organization incorporated in Ohio. Its principal place of business is in Huntington, West Virginia. It has approximately 1,500 members. Its mission is to organize and maintain a diverse grassroots organization dedicated to the improvement and preservation of the environment through education, grassroots organizing, coalition building, leadership development, and media outreach. The Coalition has focused on water quality issues and is a leading source of information about water pollution in West Virginia.

13. Plaintiff West Virginia Highlands Conservancy, Inc., is a nonprofit organization incorporated in West Virginia. It has approximately 1,700 members. It works for the conservation and wise management of West Virginia's natural resources, and is one of West Virginia's oldest environmental activist organizations. The West Virginia Highlands

Conservancy is dedicated to protecting our clean air, clean water, forests, streams, mountains and the health and welfare of the people that live her and for those who visit it to recreate.

14. Plaintiff Sierra Club is a nonprofit corporation incorporated in California, with more than 600,000 members and supporters nationwide including approximately 2,000 members who reside in West Virginia and belong to its West Virginia Chapter. The Sierra Club is dedicated to exploring, enjoying, and protecting wild places of the Earth; to practicing and promoting the responsible use of Earth's resources and ecosystems; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass the exploration, enjoyment and protection of surface water in West Virginia.

15. Plaintiffs have members, including Vivian Stockman, who use, enjoy and benefit from the water quality in the Mud River and its tributaries and the natural resources associated with those streams. They would like to recreate in areas downstream from the portion of the streams into which surface mines from the Hobet 21 complex discharge pollutants harmful to aquatic life, including total dissolved solids, conductivity, and sulfate. Excessive amounts of these pollutants degrade the water quality of the Mud River and its tributaries make the water aesthetically unpleasant and environmentally undesirable, and impair and restrict their usage of the Mud River, and its tributaries, and its associated natural resources. As a result the environmental, health, aesthetic and recreational interests of members like Ms. Stockman are adversely affected by Hobet's excessive discharges of these and other pollutants into the Mud River, in violations of its NPDES and SMCRA permits. An injunction would redress Plaintiffs' members' injuries by preventing and/or deterring future violations of Fola's permits.

16. At all relevant times, Plaintiffs were and are "persons" as that term is defined by the CWA, 33 U.S.C. § 1362(5) and SMCRA, 30 U.S.C. § 1291(19).

STATUTORY AND REGULATORY FRAMEWORK

17. Section 301(a) of the CWA, 33 U.S.C. § 1311(a) prohibits the "discharge of any pollutant by any person" into waters of the United States, except in compliance with the terms and conditions of a permit, such as NPDES permit issued by EPA or an authorized state pursuant to Section 402 of the CWA, 33 U.S.C. § 1342.

18. Section 402(a) of the CWA, 33 U.S.C. § 1342(a), provides that the permit-issuing authority may issue a NPDES Permit that authorizes the discharge will meet all applicable requirements of the CWA and other such conditions as the permitting authority determines necessary to carry out the provisions of the CWA.

19. Section 303(a) of the CWA, 33 U.S.C. § 1313(a) requires that states adopt ambient water quality standards and establish water quality criteria for particular water bodies that will protect designated uses of the water.

20. The Administrator of EPA authorized WVDEP, pursuant to Section 402(a)(2) of the Act, 33 U.S.C. § 1342(a)(2), to issue NPDES permits on May 10, 1981. 47 Fed. Reg. 22363. The applicable West Virginia law for issuing NPDES permits is the Water Pollution Control Act ("WPCA"), W.Va. Code § 22-11-1, et seq.

21. Section 505(f) of the CWA, 33 U.S.C. § 1365(f), defines and "effluent standard or limitation under this chapter," for purposes of the citizen suit provision in Section 505(a) of the CWA, 33 U.S.C. § 1365(a), to mean, among other things, an unlawful act under Section 301(a), 33 U.S.C. § 1311(a), of the CWA and "a permit or condition thereof issued" under Section 402, 33 U.S.C. § 1342, of the CWA.

22. In an action brought under Section 505(a) of the CWA, 33 U.S.C. § 1365(a), the district court has jurisdiction to order the defendant or defendants to comply with the CWA and to assess civil penalties under Section 309(d) of the CWA, 33 U.S.C. § 1365(d).

23. Under Section 505(d) of the CWA, 33 U.S.C. § 1365(d), the court "may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party, whenever the court determines such an award is appropriate."

24. Section 506 of SMCRA, 30 U.S.C. § 1256, prohibits any person from engaging in or carrying out surface coal mining operations without first obtaining a permit from OSMRE or from an approved state regulatory authority.

25. At all relevant times, the State of West Virginia has administered an approved surface mining regulatory program under SMCRA. *See* 30 C.F.R. § 946.10.

26. Among the performance standards mandated by SMCRA and the West Virginia Surface Coal Mining and Reclamation Act ("WVSCMRA") is that "[d]ischarge from areas disturbed by. . . mining shall not violate effluent limitations or cause a violation of applicable water quality standards. 30 C.F.R. §§ 816.42 and 817.42; 38 C.S.R § 2-14.5.b.

27. The performance standards further require that "[a]ll surface mining and reclamation activities shall be conducted . . . to prevent material damage to the hydrologic balance outside the permit area." 38 C.S.R. § 2-14.5. At a minimum, "material damage" includes violations of water quality standards.

28. The legislative rules promulgated under WVSCMRA provide that, as a general condition of all surface mining permits issued under the WVSCMRA, the permittee must comply with all applicable performance standards. 38 C.S.R. § 2-3.33.c.

29. Section 520(a) of SMCRA, 30 U.S.C. § 1270(a), authorizes any person adversely affected to bring an action in federal court to compel compliance with SMCRA against any "person who is alleged to be in violation of any rule, regulation, order, or permit issued pursuant to [SMCRA]."

30. Section 520(d) of SMCRA, 30 U.S.C. § 1270(d) authorizes the Court to award the costs of litigation, including attorney fees and expert witness fees, "to pay any party, whenever the court determines such an award is appropriate."

31. WVDEP is the agency in the State of West Virginia that administers the State's CWA and SMCRA programs and issues WV/NPDES Permits and WV/SMCRA Permits.

FACTS

32. Hobet controls several mining permits in and around the Mud River watershed. Beginning in 1985, surface mining by the company in the watershed has become extensive.

33. Beginning in the 1980's, the WVDEP issued permits to Hobet for several mining discharges in the Ballard Fork (a tributary of the Mud River) watershed. On April 12, 1985, the agency issued permit S003285, for a 1356-acre surface mine, which now encompasses four valley fills draining into Ballard Fork.

34. On February 16, 1989, the WVDEP issued permit S508088 for an adjacent 400-acre surface mien with three additional valley fills draining to Ballard Fork.

35. On November 9, 1989, the WVDE issued permits S502689 for a mine which extends pas the confluence of Ballard Fork and the Mud River. This 504-acre surface mine includes three valley fills that drain into Ballard Fork, one valley fill that drains directly into the Mud River, and four valley fills that drain to the other side of the ridge into Stanley Fork. Discharges from these mines were regulated pursuant to NPDES permit WV0099392.

36. Each of the Ballard Fork valley fills have been reclaimed, and the relevant outfalls have been deleted from the NPDES permit. Valley Fill 27 of permit S5026-89, which discharges through outfall 020 into the Mud River, is still regulated pursuant to the NDPES permit, as are valley fills 19/20, 22, 26 and 28, which drain through outfalls 27, 015, 019, and 021 respectively into Stanley Fork, as shown in the chart below.

Watershed	SMCRA Permit	WN/NPDES Permit	Valley Fill	Outfall
Ballard Fork	S32-85	WV0099392	16 (through pond 11)	Deleted
Ballard Fork	S32-85	WV0099392	16 (through pond 10)	Deleted
Ballard Fork	S32-85	WV0099392	12	Deleted
Ballard Fork	S32-85	WV0099392	13	Deleted
Ballard Fork	S5080-88	WV0099392	18	Deleted
Ballard Fork	S5026-89	WV0099392	21	Deleted
Ballard Fork	S5026-89	WV0099392	24	Deleted
Ballard Fork	S5026-89	WV0099392	25	Deleted
Mud River	S5026-89	WV0099392	27	020
Stanley Fork	S5026-89	WV0099392	19/20	027
Stanley Fork	S5026-89	WV0099392	22	015
Stanley Fork	S5026-89	WV0099392	26	019
Stanley Fork	S5026-89	WV0099392	28	021

37. Mining in the Mud River watershed expanded downstream with the permitting of Hobet's Sugartree Branch and Westridge mines in the 1990's.

38. On November 24, 1992, WVDEP issued permit S501692 for the 1455-acre Sugartree Branch mine. This permit includes two valley fills in Stanley Fork and five valley fills in Sugartree Branch. Discharges from each of these fills are regulated pursuant to WV/NPDES permit WV0099392, as shown in the chart below.

Watershed	SMCRA Permit	WN/NPDES Permit	Valley Fill	Outfall
Stanley Fork	S5016-92	WV0099392	34	014

Stanley Fork	S5016-92	WV0099392	36	028
Sugartree Branch	S5016-92	WV0099392	37	036
Sugartree Branch	S5016-92	WV0099392	A2-1	077
Sugartree Branch	S5016-92	WV0099392	A2-2	078
Sugartree Branch	S5016-92	WV0099392	A2-3	079

39. On September 4, 1996, WVDEP issued permit S500396 for the 2073-acre Westridge Surface Mine. This permit contains at least seven valley fills discharging into Lukey Fork and the Mud River. Discharge from each of these fills is regulated pursuant to permit WV1016776.

Watershed	SMCRA Permit	WN/NPDES Permit	Valley Fill	Outfall
Lukey Fork	S500396	WV1016776	56	006
Lukey Fork	S500396	WV1016776	55	005
Lukey Fork	S500396	WV1016776	54	004
Mud River	S500396	WV1016776	53	003
Mud River	S500396	WV1016776	52	002
Mud River	S500396	WV1016776	51	041
Mud River	S500396	WV1016776	50	001

40. In the early 2000's mining expanded along the ridges separating Berry Branch and the Mud River.

41. On April 1, 2004, the WVDEP permitted the 480-acre Westridge No. 3 Surface Mine this mine contains three valley fills, each discharging into the Mud River and each regulated pursuant to WV/NPDES permit WV102089.

42. WVDEP permitted Hobet's Surface Mine 44 through SMCRA permit S5002-03 on November 17, 2006. That mine contains two valley fills each of which are regulated pursuant to NPDES permit WV102289 and which drain directly into the Mud River.

43. Also, during the mid-2000's the Sugartree permit was expanded to include a fill in the Berry Branch (permitted pursuant to S5016-92 and WV0099392).

Watershed	SMCRA Permit	WN/NPDES Permit	Valley Fill	Outfall
Mud River	S500203	WV1020889	1	001
Mud River	S500203	WV1020889	2	002
Mud River	S500203	WV1020889	3	003
Berry Branch	S501692	WV0099392	A2-4	084

44. Part C of each of Hobet's NPDES permits incorporates by reference 47 C.S.R. § 30-5.1.f, which provides that, "[t]he discharge or discharges covered by a WV/NPDES permit are to be of such quality so as not to cause a violation of the applicable water quality standards adopted by the Department of Environmental Protection, Title 47, Series 2."

45. WVDEP's narrative water quality standards prohibit discharges of "[m]aterials in concentrations which are harmful, hazardous, or toxic to man, animal or aquatic life" or that cause "significant adverse impacts to the chemical, physical, hydrologic, or biological components of aquatic ecosystems." 47 C.S.R. § 2-3.2.e & 2-3.2.i.

46. Historically, water quality in the area of the Hobet 21 complex was characterized by low levels of metals, sulfates, and dissolved ions, and neutral to slightly alkaline water. In the application for the Westridge Mine 404 permit, in 2003, the applicant stated:

> Baseline tests of the "21" complex area, in areas where there has been little of no mining, showed a readily identifiable water quality character. This character remains constant except for seasonal variation in quantity.
> - pH 6.0 – 7.0
> - Acidity <1.0 mg/l
> - Alkalinity 10-30 mg/l
> - Fe < 1.0 mg/l
> - Mn < 0.1 mg/l
> - TSS < 10 mg/l
> - TDS < 100 mg/l
> - Sulfate < 50 mg/l

47. Baseline water quality data from various tributaries in the watershed taken before they were mined confirm low levels of ionic pollution, including low levels of sulfate.

48. For example, baseline water quality in Stanley Fork exhibited the following characteristics:

	8/25/1987	**1/19/1988**	**2/10/1988**
Conductivity	57	45	51
Sulfates	9	11	12
TDS	40	21	33

49. Premining data from Berry Branch, in 1988 showed conductivity of 77 µS/cm and sulfate levels of 11 mg/l.

50. Premining benthic data show that in addition to low ionic concentrations, streams in the Mud River watershed were characterized by high WVSCI scores.

Location	**Sample date**	**WVSCI**	**Conductivity**
(38.106167, -81.968778). In Berry Branch, 1.38 mi from confluence with Mud R.	3/21/05	88	42
(38.108056, -81.967917). In Berry Branch, 1.51 mi from confluence with Mud R.	3/21/05	93	35
(38.112611, -81.963333). In Berry Branch, 1.91 mi from confluence with Mud R.	3/21/05	94	35
(38.110639, -81.96125). In UNT of Berry Branch, 0.14 mi from confluence with Berry B.	3/21/05	85	31
(38.105611, -81.957611). In UNT of Berry Branch, 0.02 mi from confluence with Berry B.	3/21/05	89	42
(38.105139, -81.955056). In UNT of Berry Branch, 0.75 mi from confluence with Berry B.	3/21/05	86	49
(38.098833, -81.9595). UNT of Mud R, 0.35 mi from confluence with Mud.	3/21/05	62	217
38.098056, -81.957167). UNT of Mud R, 0.42 mi from confluence with Mud.	3/21/05	93	110

(38.101389, -81.988361). UNT of Berry Branch, 0.02 mi from confluence with Mud.	3/21/05	76	39
(38.101972, -81.985306). UNT of Berry Branch, 0.02 mi from confluence with Mud.	3/21/05	77	38
(38.102556, -81.976556). UNT of Berry Branch, 0.02 mi from confluence with Mud.	3/21/05	75	35
(38.104889, -81.971056). UNT of Berry Branch, 0.04 mi from confluence with Mud.	3/21/05	82	31
(38.105861, -81.968556). UNT of Berry Branch, 0.02 mi from confluence with Mud.	3/21/05	78	36

51. One monitoring point that remains above the influence of mining continues to exhibit water quality marked by low levels of ionic pollutants.

WV0099392-UBB				
1/3/2014	Conductivity	87	96.7	106.4
	TDS	38	43.5	49
	Sulfates	13	15	17
	Flow (cfs)	0.03	0.03	0.04
2/17/14	Flow (cfs)	0.03	0.03	0.03
	Conductivity	60	62	65
	TDS	40	50	60
	Sulfates	9	956*	1903*
3/18/2014	Flow (cfs)	.03	.03	.03
	Conductivity	46	50	53
	TDS	28	30	32
	Sulfates	14	20	27
4/18/2014	Flow (cfs)	.04	.04	.04
	Conductivity	45	46	48
	TDS	38	43.5	49
	Sulfates	14	15	17
5/16/2014	Flow (cfs)	.0312	.03	.03
	Conductivity	51	52	52
	TDS	28	30	32

	Sulfates	15	19	23
6/22/2014	Flow (cfs)	0.03	0.03	0.03
	Conductivity	64.5	75	89
	TDS	43	51	59
	Sulfates	34	34	35

*These scores likely result from a measurement or transcription error as they are highly anomalous and inconsistent with the TDS measured on the same day.

52. Earlier data from unmined portions of the Mud River in the 1990's showed the presence of mayflies, a taxa that is known to be particularly sensitive to ionic pollution from surface mining.

53. Since mining began in the Mud River watershed, levels of ionic pollution have risen dramatically. In 2011, Ty Lindberg, Emily Bernhardt and others published a paper examining water quality monitoring data from the Mud River watershed, including thirteen instream monitoring stations on the main stem of the Mud River and eight stations on tributaries around the Hobet Mining complex. Lindberg, et al., "Cumulative Impacts of Mountaintop Mining on an Appalachian Watershed" Proceedings of the National Academy of Science, 108: 20929-34 (2012). They found that upstream of mining in the watershed, the average conductivity measurement was 156.1 µS/cm. Downstream of mining in the Mud River the average conductivity of all sampling sites was 1293.9 µS/cm; levels generally increased as the river flowed through the complex.

54. The pattern of increasing conductivity in the Mud River as it passes through the Hobet complex can be seen more recently in watershed monitoring reports submitted by the company. The following sampling sites on the Mud River are presented from the most upstream location to the most downstream location. *See also*, Appendix A.

WV1016776, UMR				
date	parameter	min	Avg	max
6/17/2014	Flow (cfs)	0.31	0.31	0.31
	Conductivity	320	405	490
	TDS	198	242	287
	Sulfates	68	129	190

WV0099392, UMR1				
date	parameter	min	Avg	max
6/17/2014	Flow (cfs)	1.8	1.8	1.8
	Conductivity	423	716	1009
	TDS	267	546	826
	Sulfates	104	271	438

WV0099392, DMR (UMR 2)				
date	parameter	min	Avg	max
6/16/2014	Flow (CFS)	2.45	2.45	2.45
	Conductivity	1087	1233	1379
	TDS	871	982	1094
	Sulfates	422	646	870

WV1020889, DMR				
date	parameter	min	Avg	max
6/16/2014	Flow (cfs)	6.75	6.75	6.75
	Conductivity	1148	1293	1438
	TDS	937	1025	1113
	Sulfates	445	669	893

55. Discharge Monitoring Reports from valley fills on the Hobet 21 Complex are discharging high levels of ionic pollution above some or all of these monitoring locations and are causing the high levels of ionic pollution in the Mud River. *See* Appendix B.

56. WVSCI scores along the Mud River and its tributaries demonstrate that the stream is biologically impaired.

57. In 2003, the WVDEP sampled four location along the stream and found each of them to be below the threshold for an impaired stream as measured by WVSCI.

58. Subsequent sampling in 2008 and 2013 showed that the Mud River remains biologically impaired, with the possible exception of certain segments immediately downstream of unnamed tributaries. (The U.S. EPA and WVDEP consider streams with WVSCI scores below 68 to be biologically impaired.)

59. The following chart shows the results of biological monitoring obtained by the WVDEP.

Stream	Milepoint	date	WVSCI	Sp. Conduc.	Sulfates	Description
Mud River	2.5	18-Sep-03	48.37			Downstream Cyrus Creek Near Barboursville
Mud River	25.4	18-Sep-03	54.65			Downstream UNT/Mud River RM 25.46 North of Balls Gap
Mud River	42.3	18-Sep-03	48.94			Downstream UNT/Mud River RM 42.39 East of Hamlin
Mud River	74.3	22-Sep-03	60.17	1247	529	Downstream Mullins Branch West of Mud
Mud River	2.5	24-Sep-08	66.95			Downstream Cyrus Creek Near Barboursville
Mud River	25.4	22-Sep-08	58.68			Downstream UNT/Mud River RM 25.46 North of Balls Gap
Mud River	52.8	18-Sep-08	69.74	754	297	Downstream of Sandlick Branch in Myra
Mud River	52.8	18-Sep-08	63.43			Downstream of Sandlick Branch in Myra
Mud River	57.4	17-Sep-08	74.49	762	289	Downstream of Big Creek in Sias
Mud River	61.7	18-Sep-08	55.54	828	313	Between Parsner Creek & Upper Mud River Reservoir Southeast of Sias

Mud River	77.1	16-Sep-08	41.2	2226	1187	Upstream Sugartree Branch Southeast of Mud
Mud River	45.7	03-Jun-13	58.33	469	132	Upstream of Mahone Creek West of Hamlin

60. The Mud River has been listed as biologically impaired on the WVDEP 303(d) list since at least 2004. WVDEP 303(d) List (2012). Sugartree Branch, Stanley Fork , and Ballard Branch are also listed as biologically impaired. *Id.* Although not yet on the 303(d) List, Berry Branch was biologically impaired the last time WVDEP measured biological health, in 2008, as demonstrated by a WVSCI score of 64.2.

61. High levels of conductivity, dissolved solids, alkalinity, and ionic chemicals (including sulfates, bicarbonates, magnesium, and calcium) are a primary cause of water quality impairment downstream from mine discharges.

62. In 2011, EPA scientists summarized the existing science connecting conductivity and biological degradation in an EPA report entitled, "A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams." That report, which was peer-reviewed by scientists on EPA's Science Advisory Board, used EPA's standard method for deriving water quality criteria to derive a conductivity benchmark of 300 µS/cm. *Id*. at xiv-xv. According to the species sensitivity distribution in the benchmark, on average, five percent of species are lost when conductivity rises to 295 µS/cm, over 50% are lost at 2000 µS/cm, and close to 60% are lost at 3000 µS/cm. *Id*. at 18. EPA found that the loss of aquatic species from increased conductivity was "a severe and clear effect." *Id*. at A-37. A statistical analysis included in the benchmark determined that at a conductivity level of 300 µS/cm a stream is 59% likely to be impaired and at 500 µS/cm a stream is 72% likely to be impaired. *Id*. at A-36.

63. The EPA Benchmark report is supported by more recent peer-reviewed studies. Cormier, et al., Derivation of a Benchmark for Freshwater Ionic Strength, Environmental Toxicology

and Chemistry, 32(2): 263-271 (2013), and references cited therein; Bernhardt, et al., "How Many Mountains Can We Mine? Assessing the Regional Degradation of Central Appalachian Rivers by Surface Coal Mining," Environmental Science & Technology, 46 (15), pp. 8115–8122 (2012). The latter study's authors found that:

> The extent of surface mining within catchments is highly correlated with the ionic strength and sulfate concentrations of receiving streams. Generalized additive models were used to estimate the amount of watershed mining, stream ionic strength, or sulfate concentrations beyond which biological impairment (based on state biocriteria) is likely. We find this threshold is reached once surface coal mines occupy >5.4% of their contributing watershed area, ionic strength exceeds 308 µS cm^{-1}, or sulfate concentrations exceed 50 mg L^{-1}.

64. Surface mines make up a large percentage of the Mud River headwaters, as much as 50 percent of the total area, at the confluence of Berry Branch and the mainstem of the river. *See* Lindberg et al. (2012) Fig. 1. As shown in Appendix B, these mines are discharging levels of conductivity and sulfates well above the levels known to cause biological impairment. *See also, infra* at pp. 15-16 (showing that discharges from unpermitted valley fills are also contributing to the ionic pollution in the Mud River). This has led to elevated levels of ionic pollution, sufficient to cause biological impairment in the Mud River, and its tributaries, including Ballard Fork, Stanley Fork, Sugartree Branch, and Berry Branch.

65. Ionic pollution from alkaline mine drainage, typically measured as conductivity, is made up of a widespread and consistent matrix of ions. (Pond et al. 2008; Palmer et al. 2010; Bernhardt and Palmer 2011; Lindberg et al. 2012; Pond et al. 2010; Pond et al. 2012; Pond et al. 2014; Kunz 2013). This matrix is typically dominated by sulfates, but also includes calcium, magnesium and bicarbonates. *Id.*

66. Sampling conducted by Lindberg at all in support of their paper "Cumulative Impacts of Mountaintop Mining on an Appalachian Watershed" shows that high levels of ions in both the Mud River and leachate from spoil material form surface mines is consistent with

alkaline mine drainage in the region and is compose of the same matrix of ions as alkaline mine drainage prevalent throughout the region. Lindberg, et al. 2012; *see also* supporting information at *www.pnas.org/content/suppl/2011/12/06/1112381108.DCSupplemental/pnas.1112381108_SI.pdf*

67. The available evidence shows that as a result of Hobet's mining in the upper portions of the Mud River watershed, the river and its tributaries have high levels of ionic pollution commonly associated with alkaline mine drainage in the region and known to cause impairment of aquatic life. The high levels of ionic pollution in alkaline mine drainage from the discharge of Hobet's valley fills has caused or contributed to the impairment of the Mud River and mined tributaries including, Ballard Fork, Stanley Fork, Sugartree Branch, and Berry Branch.

68. Upon information and belief outfalls regulated by NPDES permits WV0099392, WV1016776, WV1020889 and WV1022890 are discharging heath, as well as pollutants that cause or contribute to habitat changes by precipitating out of the water column. These discharges may also be contributing to the biological impairment of the Mud River and its tributaries.

FIRST CLAIM FOR RELIEF
(Clean Water Act Violations)

69. Plaintiffs incorporate by reference all allegations contained in paragraphs 1 through 67 *supra*.

70. Since at least March 2010, Hobet has discharged pollutants from operations on the Hobet 21 mine complex through points sources into the Mud River and its tributaries including, Lukey Fork, Ballard Fork, Berry Branch, Sugartree Branch, and Stanley Fork. These point sources include outfalls 001-006 and 041 of WV/NPDES permit WV1016776; outfalls

014-015, 019-021, 027-028, 036, 077, 079 and 085 of WV/NPDES Permit WV0099292; and outfall 003 of WV/NPDES Permit WV1020889.

71. The Mud River and its tributaries, including Lukey Fork, Ballard Fork, Berry Branch, Sugartree Branch, and Stanley Fork, are all waters of the United States within the meaning of 33 U.S.C. § 1362(7).

72. Since at least March 2010, Hobet has discharged and continues to discharge, pollutants which cause ionic stress and biological impairment in the Mud River and its tributaries, including Lukey Fork, Ballard Fork, Berry Branch, Sugartree Branch, and Stanely Fork, in violation of West Virginia's narrative water quality standards for biological integrity and aquatic life protection. 47 C.S.R. §§ 2-3.2.e & 2-3.2.i.

73. The narrative water quality standards for biological integrity and aquatic life protection are incorporated by reference into Part C of Hobet's WV/NPDES permits WV1016776, WV0099292, and WV1020889. These conditions are "effluent standards or limitations" for purposes of Sections 505(a)(1) and 505(f)(6) of the Clean Water Act because they are a condition of a permit issued under Section 402 of the Act. 33 U.S.C. §§ 1342, 1365(a)(1), 1365(f)(6)

74. Based on the WVSCI scores, 303(d) listings, and the measured concentrations of specific conductivity and sulfates in Hobet's discharges, and its failure to take corrective actions to address those conditions, Plaintiffs believe and allege that Hobet is in continuing and/or intermittent violation of its WV/NPDES Permit Nos. WV1016776, WV0099292, and WV1020889.

75. Hobet is subject to an injunction under the CWA, ordering it to cease its permit violations.

<u>SECOND CLAIM FOR RELIEF</u>
(SMCRA Violations)

76. Plaintiffs incorporate by reference all allegations contained in paragraphs 1 through 74 *supra*.

77. Each of Hobet's SMCRA permits, S32-85, S5026-89, S5080-88, S5002-03 and S5016-92 require the company to comply with performance standards of the WVSCMRA. 38 C.S.R. § 2-3.33(c).

78. Those standards provide that "discharge from areas disturbed by surface mining shall not violate effluent limitations or cause a violation of applicable water quality standards." 38 C.S.R. § 2-14.5.b.

79. In addition to the effluent limitations at each outfall listed in the prior section, Hobet's discharges from bond-released valley fills on Ballard Fork are causing violations of water quality standards, These include discharges from valley fills 12, 13, and 16 of permit S32-85; and valley fill 18 of permit S5080-88 and valley fills, 21, 24, and 25 of permit S5026-89.

80. West Virginia water quality standards prohibit discharges of "[m]aterials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life," or that cause "significant adverse impacts to the chemical, physical, hydrologic, or biological components of the aquatic ecosystems." 47 C.S.R. §§ 2-3.2.e. & 2-3.2.i.

81. WVSCMRA performance standards also provide that "[a]ll surface mining and reclamation activities shall be conducted. . . to prevent material damage to the hydrologic balance outside the permit area." 38 C.S.R. § 2-14.5 "Material damage," at a minimum includes violations of water quality standards.

82. By violating West Virginia water quality standards for biological integrity and aquatic life protection at its Hobet 21 complex, Hobet has also violated and continues to violate, the performance standards incorporated as conditions in its WVSCMRA permits.

83. Federal and State performance standards require that, "[i]f drainage control, restabilization, and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet the requirements of this section and § 816.42, the operator shall use and maintain the necessary water-treatment facilities or water quality controls." 30 C.F.R. § 816.41(d)(1); *see also*¸ 38 C.S.R. § 2-14.5.c ("Adequate facilities shall be installed, operated and maintained using the best technology currently available in accordance with the approved preplan to treat any water discharged from the permit area so that it complies with the requirements of subdivision 14.5.b of this subsection.").

84. The violations identified herein show that Hobet's treatment methods are insufficient to meet that requirement. Thus, the performance standards require Hobet to construct systems that will effectively treat its effluent to the levels that comply with all applicable water quality standards.

85. Each violation of Hobet's WVSCMRA permits is as violation of SMCRA and is enforceable under the citizen suit provision of SMCRA, 30 U.S.C. § 1270(a).

86. Hobet is subject to an injunction under SMCRA ordering it to cease its permit violations.

RELIEF REQUESTED

WHEREFORE, Plaintiffs respectfully request that this Court enter an Order:

1) Declaring that Hobet has violated and is in continuing violation of the Clean Water Act and SMCRA;

2) Enjoining Hobet from operating its facilities at the Hobet 21 complex in such as manner as will result in further violations of the effluent limitations in its WV/NPDES permits;

3) Ordering Hobet to immediately comply with the effluent limitations in its WV/NPDES permits;

4) Ordering Hobet to immediately comply with the terms and conditions of its SMCRA permits;

5) Order Hobet to conduct monitoring and sampling to determine the environmental effects of its violations, to remedy and repair environmental contamination and/or degradation caused by its violations, and restore the environment to its prior uncontaminated condition;

6) Awarding Plaintiffs their attorney and expert witness fees and all other reasonable expenses incurred in pursuit of this action; and

7) Granting other such relief as the Court deems just and proper.

Respectfully submitted,

/s/ Michael Becher________________

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APPENDIX A

Stanley Fork

WV0099392, DSF				
date	parameter	min	avg	max
1/20/2014	Flow (CFS)	1.07	1.07	1.07
	Conductivity	1537	1587	1637
	TDS	1083	1165	1247
	Sulfates	464	582	700
2/18/2014	Flow (CFS)	1.27	1.29	1.30
	Conductivity	1382	1430	1478
	TDS	1029	1079	1129
	Sulfates	624	669	715
3/17/2014	Flow (CFS)	1.32	1.32	1.32
	Conductivity	1503	1591	1680
	TDS	1196	1240	1284
	Sulfates	796	828	860
4/22/2014	Flow (CFS)	1.32	1.32	1.32
	Conductivity	1566	1653	1740
	TDS	1200	1347	1494
	Sulfates	954	1020	1086
5/22/2014	Flow (CFS)	1.31	1.31	1.31
	Conductivity	1689	1727	1765
	TDS	1565	1601	1637
	Sulfates	1039	1071	1104
6/17/2014	Flow (CFS)	1.30	1.30	1.31
	Conductivity	1678	1685	1693
	TDS	1411	1433	1455
	Sulfates	765	877	989
7/17/2014	Flow	1.30	1.30	1.31
	Conductivity	1912	1991	2070
	TDS	1644	1742	1840
	Sulfates	285	1134	1983
8/19/2014	Flow (CFS)	1.29	1.29	1.29
	Conductivity	2050	2365	2680
	TDS	1950	1995	2040
	Sulfates	956	1013	1071
9/16/2014	Flow	1.3	1.3	1.3
	Conductivity	1712	1752	1791
	TDS	1488	1535	1582
	Sulfates	859	1050	1241

Sugartree Branch

WV0099392, DSB				
date	parameter	min	avg	max
1/16/2014	Flow (CFS)	0.28	0.28	0.28
	Conductivity	1315	1331	1348
	TDS	843	867	891
	Sulfates	508	513	518
2/18/2014	Flow (CFS)	0.29	0.29	0.29
	Conductivity	1048	1207	1366
	TDS	706	859	1013
	Sulfates	446	703	960
3/17/2014	Flow (CFS)	0.29	0.29	0.29
	Conductivity	1382	1409	1456
	TDS	927	1021	116
	Sulfates	643	664	685
4/17/2014	Flow (CFS)	.294	.29	.29
	Conductivity	1142	1352	1563
	TDS	828	1034	1240
	Sulfates	534	676	818
5/16/2014	Flow (CFS)	.076	.19	.30
	Conductivity	1445	1446	1448
	TDS	1172	1185	1199
	Sulfates	578	635	692
6/16/2014	Flow (CFS)	0.30	0.30	0.30
	Conductivity	1464	1565	1667
	TDS	1167	1269	1372
	Sulfates	558	733	909
7/18/2014	Flow(CFS)	.29	0.29	0.29
	Conductivity	1654	1707.5	1761
	TDS	1402	1484	1567
	Sulfates	498	758	1018
8/18/2014	Flow(CFS)	0.28	0.28	0.28
	Conductivity	1632	1679	1726
	TDS	1710	1710	1710
	Sulfates	606	608	609
9/17/2014	Flow(CFS)	.29	.29	.29
	Conductivity	1280	1406	1531
	TDS	1073	1073	1073
	Sulfates	321	676	732

<u>Berry Branch</u>

WV0099392, DBB				
date	parameter	min	avg	max
1/22/2014	Flow (CFS)	1.22	1.78	2.34
	Conductivity	934	1058	1183
	TDS	598	683	768
	Sulfates	432	479	526
2/17/2014	Flow (CFS)	2.01	3.23	4.46
	Conductivity	461	718	975
	TDS	266	437	608
	Sulfates	181	1002	1822
3/18/2014	Flow (CFS)	2.5	3.07	3.65
	Conductivity	861	1144	1426
	TDS	605	828	1050
	Sulfates	401	582	763
4/17/2014	Flow (CFS)	3.37	3.85	4.33
	Conductivity	687	1077	1467
	TDS	461	906	1352
	Sulfates	298	612	925
5/16/2014	Flow (CFS)	0.89	2.42	3.94
	Conductivity	1020	1298	1576
	TDS	838	1002	1166
	Sulfates	505	1028	1551
6/16/2014	Flow (CFS)	0.283	0.59	0.89
	Conductivity	1204	1607	2010
	TDS	1026	1384	1742
	Sulfates	471	857	1243
7/16/2014	Flow (CFS)	0.22	0.33	0.45
	Conductivity	1760	1761	1764
	TDS	1406	1462	1519
	Sulfates	733	1059	1385
8/19/2014	Flow (CFS)	<0.01	0.08	0.16
	Conductivity	1762	1762	1762
	TDS	1537	1537	1537
	Sulfates	717	717	717
9/16/2014	Flow (CFS)	1.114	1.89	2.67
	Conductivity	1005	1111	1216
	TDS	812	930	1047
	Sulfates	525	600	675

Mud River

WV0099392,UMR1				
date	parameter	min	avg	max
1/16/2014	Flow (cfs)	1.0	1.0	1.0
	Conductivity	227	244	261
	TDS	139	148	157
	Sulfates	14	43	72
2/20/2014	Flow (cfs)	0.99	1.39	1.78
	Conductivity	213	231	249
	TDS	30	84	138
	Sulfates	67	82	98
3/20/2014	Flow (cfs)	1.78	1.79	1.8
	Conductivity	185	202	219
	TDS	93	112	130
	Sulfates	38	54	70
4/22/2014	Flow (cfs)	1.81	1.81	1.81
	Conductivity	282	328	375
	TDS	182	198	214
	Sulfates	99	110	122
5/21/2014	Flow (cfs)	1.80	1.80	1.80
	Conductivity	298	320	343
	TDS	184	198	212
	Sulfates	81	94	107
6/17/2014	Flow (cfs)	1.8	1.8	1.8
	Conductivity	423	716	1009
	TDS	267	546	826
	Sulfates	104	271	438
7/16/2014	Flow (cfs)	1.8	1.8	1.8
	Conductivity	537	8178	1098
	TDS	347	618	888
	Sulfates	162	340	519
8/19/2014	Flow (cfs)	1.79	1.79	1.79
	Conductivity	939	1032	1126
	TDS	810	875	940
	Sulfates	347	384	422
9/16/2014	Flow (cfs)	1.8	1.8	1.8
	Conductivity	916	978	1039
	TDS	705	737	769
	Sulfates	412	470	529

WV0099392, DMR (UMR 2)				
date	parameter	min	avg	max
1/16/2014	Flow (CFS)	2.0	2.0	2.0
	Conductivity	593	624	654
	TDS	373	375	377
	Sulfates	200	207	214
2/18/2014	Flow (CFS)	2.01	2.12	2.23
	Conductivity	506	592	679
	TDS	296	348	401
	Sulfates	183	270	357
3/17/2014	Flow (CFS)	2.23	2.23	2.23
	Conductivity	773	870	966
	TDS	423	522	620
	Sulfates	319	390	461
4/17/2014	Flow (CFS)	2.23	2.23	2.23
	Conductivity	463	766	1070
	TDS	322	533	744
	Sulfates	144	371	598
5/16/2014	Flow (CFS)	2.22	2.34	2.45
	Conductivity	594	684	774
	TDS	363	449	535
	Sulfates	335	344	354
6/16/2014	Flow (CFS)	2.45	2.45	2.45
	Conductivity	1087	1233	1379
	TDS	871	982	1094
	Sulfates	422	646	870
7/18/2014	Flow (CFS)	2.45	2.46	2.46
	Conductivity	1273	1584	1896
	TDS	954	1356	1759
	Sulfates	614	710	805
8/18/2014	Flow (CFS)	2.45	2.45	2.45
	Conductivity	1637	1672	1708
	TDS	1511	1523	1535
	Sulfates	653	662	670
9/17/2014	Flow (CFS)	2.45	2.46	2.46
	Conductivity	1253	1272	1291
	TDS	997	998	1000
	Sulfates	651	700	748

WV1020889, DMR				
date	parameter	min	avg	max
1/16/2014	Flow (cfs)	6.74	6.74	6.74
	Conductivity	665	688	712
	TDS	418	430	443
	Sulfates	235	240	245
2/18/2014	Flow (cfs)	6.74	6.74	6.74
	Conductivity	539	648	757
	TDS	329	414	498
	Sulfates	209	294	380
3/17/2014	Flow (cfs)	6.75	6.75	6.75
	Conductivity	766	888	1009
	TDS	485	578	672
	Sulfates	353	386	418
4/17/2014	Flow (cfs)	6.75	6.75	6.75
	Conductivity	512	832	1152
	TDS	331	566	802
	Sulfates	167	398	629
5/16/2014	Flow (cfs)	6.75	6.75	6.75
	Conductivity	778	820	862
	TDS	566	586	606
	Sulfates	376	389	402
6/16/2014	Flow (cfs)	6.75	6.75	6.75
	Conductivity	1148	1293	1438
	TDS	937	1025	1113
	Sulfates	445	669	893
7/18/2014	Flow (cfs)	6.75	6.75	6.76
	Conductivity	1445	1676	1908
	TDS	1180	1475	1770
	Sulfates	520	563	606
8/18/2014	Flow (cfs)	6.73	6.74	6.75
	Conductivity	1564	1682	1800
	TDS	1410	1528	1645
	Sulfates	588	621	655
9/17/2014	Flow (cfs)	6.74	6.74	6.74
	Conductivity	1253	1349	1445
	TDS	1030	1094	1159
	Sulfates	708	744	780

Appendix B

Permit WV1016776

WV1016776, 001				
date	parameter	min	avg	max
3/20/2014	Flow (gpm)	865	865	865
	Conductivity	2310	2325	2340
	TDS	1960	1964	1968
	Sulfates	1051	1171	1291
4/17/2014	Flow (gpm)	86.5	478	865
	Conductivity	2330	2340	2350
	TDS	1876	1905	1934
	Sulfates	1224	1233	1243
5/16/2014	Flow (gpm)	865	866	868
	Conductivity	2370	2380	2390
	TDS	2037	2041	2045
	Sulfates	880	1045	1211
6/16/2014	Flow (gpm)	868	868	868
	Conductivity	2400	2400	2400
	TDS	2036	2114	2191
	Sulfates	960	1198	1436
7/18/2014	Flow (gpm)	868	870	872
	Conductivity	2480	2575	2670
	TDS	2101	2243	2385
	Sulfates	706	912	1119
8/18/2014	Flow (gpm)	864	865	866
	Conductivity	2600	2670	2740
	TDS	2711	2738	2754
	Sulfates	942	950	958
9/17/2014	Flow (gpm)	868	868	869
	Conductivity	2352	2376	2400
	TDS	1943	2006	2068
	Sulfates	1252	1288	1325

WV1016776, 002				
date	parameter	min	avg	max
3/21/2014	Flow (gpm)	112	136.5	161
	Conductivity	2480	2525	2570
	TDS	2183	2195	2207

	Sulfates	761	1203	1646
4/22/2014	Flow (gpm)	127	127	127
	Conductivity	2520	2525	2530
	TDS	2236	2377	2418
	Sulfates	1179	1588	1998
5/16/2014	Flow (gpm)	108	116	125
	Conductivity	2490	2515	2540
	TDS	2430	2438	2447
	Sulfates	1591	1661	1732
6/17/2014	Flow (gpm)	110	111	112
	Conductivity	2490	2645	2800
	TDS	2048	2314	2579
	Sulfates	1349	1674	2000
7/18/2014	Flow (gpm)	112	112	112
	Conductivity	2680	2705	2730
	TDS	2469	2720	2972
	Sulfates	1767	1901	2035
8/18/2014	Flow (gpm)	73	74	75
	Conductivity	2420	2595	2770
	TDS	2568	2787	2006
	Sulfates	1295	1447	1600
9/16/2014	Flow (gpm)	77	78	78
	Conductivity	1899	2324	2750
	TDS	1704	2167	2630
	Sulfates	1566	1569	1572

WV1016776, 003				
date	parameter	min	avg	max
3/20/2014	Flow (gpm)	78	78	78
	Conductivity	1657	1755	1854
	TDS	1268	1340	1412
	Sulfates	929	999	1070
4/22/2014	Flow (gpm)	76	77	78
	Conductivity	1604	1692	1780
	TDS	1306	1397	1489
	Sulfates	1099	1435	1771
5/21/2014	Flow (gpm)	75	75	75
	Conductivity	1547	1632	1717
	TDS	1373	1426	1480
	Sulfates	851	864	878
6/17/2014	Flow (gpm)	74	74	75

	Conductivity	1602	1613	1624
	TDS	1193	1268	1342
	Sulfates	690	951	1212
7/16/2014	Flow (gpm)	77	78	78
	Conductivity	1868	1974	2080
	TDS	1605	1753	1902
	Sulfates	981	1087	1193
8/19/2014	Flow (gpm)	70	71	72
	Conductivity	1994	2017	2040
	TDS	1888	1892	1896
	Sulfates	838	882	925
9/16/2014	Flow (gpm)	75	75	75
	Conductivity	1445	1594	1743
	TDS	1202	1336	1469
	Sulfates	745	850	955

WV1016776, 004				
date	parameter	min	avg	max
3/20/2014	Flow (gpm)	62	62	62
	Conductivity	2039	2133.5	2228
	TDS	1478	1559	1641
	Sulfates	856	906	957
4/22/2014	Flow (gpm)	36	49	62
	Conductivity	1517	1551	1586
	TDS	1172	1267	1362
	Sulfates	157	552	947
5/22/2014	Flow (gpm)	36	36	36
	Conductivity	1635	1657	1679
	TDS	1424	1447	1471
	Sulfates	980	988	997
6/17/2014	Flow (gpm)	36	37	38
	Conductivity	1692	1714	1735
	TDS	1451	1460	1469
	Sulfates	781	870	959
7/16/2014	Flow (gpm)	38	38	38
	Conductivity	1756	1828	1900
	TDS	1598	1668	1738
	Sulfates	957	1027	1097
8/19/2014	Flow (gpm)	36	38	40
	Conductivity	1973	1992	2010
	TDS	1830	1858	1886

	Sulfates	940	1022	1104
9/16/2014	Flow (gpm)	44	44	44
	Conductivity	1633	1644	1654
	TDS	1388	1388	1388
	Sulfates	757	986	1216

WV1016776, 005				
date	parameter	min	avg	max
3/20/2014	Flow (gpm)	14	14	14
	Conductivity	337	378	420
	TDS	224	242	261
	Sulfates	143	184	213
4/22/2014	Flow (gpm)	14	14	14
	Conductivity	362	379	397
	TDS	226	250	274
	Sulfates	196	486	777
5/22/2014	Flow (gpm)	13	13.5	14
	Conductivity	320	372	424
	TDS	212	248	284
	Sulfates	116	146	176
6/17/2014	Flow (gpm)	16	16	16
	Conductivity	264	292	321
	TDS	175	195	215
	Sulfates	95	100	104
7/02/2014	Flow (gpm)	<0.01	9	18
	Conductivity	334	334	334
	TDS	213	213	213
	Sulfates	94	94	94
8/05/2014	Flow (gpm)	0	0	0
9/16/2014	Flow (gpm)	18	20	22
	Conductivity	303	600	898
	TDS	167	353	539
	Sulfates	84	234	385

WV1016776, 006				
date	parameter	min	avg	max
3/20/2014	Flow (gpm)	62	62	62
	Conductivity	1388	1465	1542
	TDS	1075	1124	1174
	Sulfates	755	814	873

4/22/2014	Flow (gpm)	38	50	62
	Conductivity	1414	1452	1491
	TDS	1069	1154	1240
	Sulfates	191	574	958
5/22/2014	Flow (gpm)	36	37	38
	Conductivity	1359	1431	1504
	TDS	1188	1266	1344
	Sulfates	884	954	1025
6/17/2014	Flow (gpm)	40	41	42
	Conductivity	1381	1478	1575
	TDS	1131	1271	1411
	Sulfates	645	739	833
7/02/2014	Flow (gpm)	42	44	46
	Conductivity	1649	1740	1831
	TDS	1330	1468	1607
	Sulfates	741	860	980
8/05/2014	Flow (gpm)	<0.01	23	46
	Conductivity	1784	1784	1784
	TDS	1580	1580	1580
	Sulfates	954	954	954
9/16/2014	Flow (gpm)	48	49	50
	Conductivity	1495	1538	1581
	TDS	1298	1302	1307
	Sulfates	616	783	951

WV1016776, 041				
date	parameter	min	avg	max
3/17/2014	Flow (gpm)	48	49	50
	Conductivity	986	1320	1655
	TDS	1224	1423	1623
	Sulfates	952	1035	1118
4/17/2014	Flow (gpm)	46	47	48
	Conductivity	1454	1722	1990
	TDS	1198	1466	1735
	Sulfates	831	1023	1216
5/16/2014	Flow (gpm)	48	49	50
	Conductivity	1553	1715	1878
	TDS	1289	1430	1572
	Sulfates	830	1018	1206
6/16/2014	Flow (gpm)	46	47	48

	Conductivity	2050	2165	2280
	TDS	1921	1946	1971
	Sulfates	950	1200	1450
7/18/2014	Flow (gpm)	46	47	48
	Conductivity	2420	2495	2570
	TDS	2250	2320	2390
	Sulfates	797	1045	1294
8/18/2014	Flow (gpm)	42	42	43
	Conductivity	2110	2245	2380
	TDS	1924	2259	2594
	Sulfates	694	701	709
9/17/2014	Flow (gpm)	48	49	50
	Conductivity	1271	1816	2360
	TDS	1043	1570	2097
	Sulfates	579	1032	1486

Permit WV0099292

WV0099392, 014				
date	parameter	min	avg	max
1/20/2014	Flow (gpm)	441	441	441
	Conductivity	1625	1642	1659
	TDS	1162	1235	1308
	Sulfates	713	1175.5	1638
2/24/2014	Flow (gpm)	548	567	586
	Conductivity	1474	1484	1494
	TDS	1068	1106	1144
	Sulfates	631	652	674
3/21/2014	Flow (gpm)	586	586	586
	Conductivity	1566	1633.5	1701
	TDS	1189	1265	1341
	Sulfates	473	649	825
4/22/2014	Flow (gpm)	584	585	586
	Conductivity	1644	1912	2180
	TDS	1307	1605	1903
	Sulfates	933	1204	1476
5/22/2014	Flow (gpm)	582	582	582
	Conductivity	1806	1812	1819
	TDS	1592	1601	1611
	Sulfates	1005	1043	1082
6/17/2014	Flow (gpm)	584	584	584
	Conductivity	1783	1832	1881
	TDS	1534	1554	1574
	Sulfates	819	930	1042
7/17/2014	Flow (gpm)	582	583	584
	Conductivity	1914	1977	2040
	TDS	1715	1785	1855
	Sulfates	1634	1731	1829
8/19/2014	Flow (gpm)	577	578	578
	Conductivity	2090	2105	2120
	TDS	1987	2031	2076
	Sulfates	886	934	983
9/16/2014	Flow (gpm)	580	580	580
	Conductivity	1817	1844	1872
	TDS	1522	1565	1608
	Sulfates	818	1063	1308

WV0099392, 015				
date	parameter	min	avg	max
1/20/2014	Flow (gpm)	53	53	53
	Conductivity	1852	1926	2000
	TDS	1344	1488	1632
	Sulfates	999	1218	1437
2/24/2014	Flow (gpm)	46	50	55
	Conductivity	1642	1694	1747
	TDS	1308	1356	1404
	Sulfates	903	957	1012
3/21/2014	Flow (gpm)	44	44	44
	Conductivity	1775	1937.5	2100
	TDS	1463	1637.5	1812
	Sulfates	1177	1258.5	1340
4/23/2014	Flow (gpm)	44	44	44
	Conductivity	1854	2047	2240
	TDS	1581	1757	1934
	Sulfates	1417	1446	1696
5/22/2014	Flow (gpm)	20	21	22
	Conductivity	1981	2030	2080
	TDS	1756	1829	1902
6/17/2104	Flow (gpm)	22	23	24
	Conductivity	2030	2035	2040
	TDS	1783	1789	1795
	Sulfates	1064	1227	1390
7/17/2014	Flow (gpm)	18	21	24
	Conductivity	2360	2470	2580
	TDS	2096	2182	2269
	Sulfates	2599	2738	2878
8/19/2014	Flow (gpm)	16	17	18
	Conductivity	2360	2455	2550
	TDS	2318	2495	2673
	Sulfates	1261	1348	1435
9/16/2014	Flow (gpm)	20	20	20
	Conductivity	2150	2190	2230
	TDS	1864	1870	1876
	Sulfates	1116	1435	1754

WV0099392, 019				
date	parameter	min	avg	max
1/20/2014	Flow (gpm)	18	18	18

	Conductivity	2110	2250	2390
	TDS	1661	1795	1929
	Sulfates	1342	1552.5	1763
2/24/2014	Flow (gpm)	30	39	48
	Conductivity	1938	2094	2250
	TDS	1601	1670	1740
	Sulfates	173	781	1389
3/21/2014	Flow (gpm)	26	28	30
	Conductivity	1980	2130	2280
	TDS	1753	1859.5	1966
	Sulfates	1397	1446	1495
4/23/2014	Flow (gpm)	25	27.5	30
	Conductivity	2150	2230	2310
	TDS	1876	1945	2014
	Sulfates	1834	1886	1939
5/21/2014	Flow (gpm)	16	17	18
	Conductivity	2130	2195	2260
	TDS	1999	2174	2349
	Sulfates	1694	1778	1862
6/17/2014	Flow (gpm)	20	22	23
	Conductivity	2120	2145	2170
	TDS	1941	1962	1983
	Sulfates	1212	1376	1540
7/17/2014	Flow (gpm)	14	18	22
	Conductivity	2420	2575	2730
	TDS	2274	2493	2713
	Sulfates	2874	3029	3184
8/19/2014	Flow (gpm)	14	14	15
	Conductivity	2610	2720	2830
	TDS	2746	2784	2822
	Sulfates	1501	1548	1596
9/16/2014	Flow (gpm)	16	16	16
	Conductivity	1907	1937	1967
	TDS	1670	1686	1702
	Sulfates	938	1187	1436

WV0099392, 20				
date	parameter	min	avg	max
1/20/2014	Flow (gpm)	10	10	10
	Conductivity	1623	1678	1734
	TDS	1249	1310	1372

	Sulfates	853	854	856
2/20/2014	Flow (gpm)	12	12	12
	Conductivity	1465	1578	1691
	TDS	1201	1246	1292
	Sulfates	159	522	885
3/21/2014	Flow (gpm)	12	12	12
	Conductivity	1651	1676	1701
	TDS	1363	1375	1387
	Sulfates	985	120	1054
4/22/2014	Flow (gpm)	10	11	12
	Conductivity	1719	1723	1227
	TDS	1444	1494	1544
	Sulfates	784	1009	1234
5/21/2014	Flow (gpm)	9	9	9
	Conductivity	1581	1609	1637
	TDS	1389	1391	1394
	Sulfates	854	867	880
6/17/2014	Flow (gpm)	10	10	10
	Conductivity	1617	1633	1649
	TDS	1352	1390	1428
	Sulfates	719	926	1134
7/16/2014	Flow (gpm)	10	11	12
	Conductivity	1601	1608	1616
	TDS	1396	1412	1428
	Sulfates	859	900	941
8/19/2014	Flow (gpm)	14	14	14
	Conductivity	1580	1634	1689
	TDS	1469	1584	1699
	Sulfates	675	724	772
9/16/2014	Flow (gpm)	14	14	15
	Conductivity	1496	1514	1532
	TDS	1252	1277	1302
	Sulfates	694	850	1007

WV0099392, 021				
date	parameter	min	avg	max
1/20/2014	Flow (gpm)	53	53	53
	Conductivity	1040	1076	1112
	TDS	647	694.5	742
	Sulfates	353	437.5	522
2/24/2014	Flow (gpm)	54	54	54

	Conductivity	889	914	939
	TDS	568	598	629
	Sulfates	315	336	358
3/21/2014	Flow (gpm)	48	49	50
	Conductivity	935	963	991
	TDS	635	672	709
	Sulfates	421	429.5	438
4/22/2014	Flow (gpm)	44	45	46
	Conductivity	916	934	952
	TDS	620	650	680
	Sulfates	429	471	513
5/22/2014	Flow (gpm)	36	37	38
	Conductivity	997	1011	1026
	TDS	788	789	791
	Sulfates	530	540	550
6/17/2014	Flow (gpm)	30	31	32
	Conductivity	916	964	1013
	TDS	785	810	838
	Sulfates	395	470	545
7/03/2014	Flow (gpm)	<0.01	4.5	9.0
	Conductivity	1152	1152	1152
	TDS	782	782	782
	Sulfates	836	836	836
8/04/2014	Flow (gpm)	0	0	0
9/02/2014	Flow (gpm)	0	0	0

WV0099392, 027				
date	parameter	min	avg	max
1/20/2014	Flow (gpm)	222	222	222
	Conductivity	1040	1076	1112
	TDS	1336	1406	1477
	Sulfates	1755	1812	1869
2/24/2014	Flow (gpm)	294	321	348
	Conductivity	1599	1659	1719
	TDS	1378	1390	1402
	Sulfates	823	964	1106
3/21/2014	Flow (gpm)	161	190	218
	Conductivity	1722	1810	1899
	TDS	1436	1507	1578
	Sulfates	1085	1100	1115
4/23/2014	Flow (gpm)	244	244	244

	Conductivity	1753	1802	1851
	TDS	1455	1496	1538
	Sulfates	997	1165	133
5/22/2014	Flow (gpm)	127	128	128
	Conductivity	2050	2110	2170
	TDS	1859	1978	2098
	Sulfates	1355	1412	1470
6/17/2014	Flow (gpm)	180	180	180
	Conductivity	1959	2029	2100
	TDS	1745	1822	1899
	Sulfates	1050	1153	1256
7/17/2014	Flow (gpm)	179	180.5	182
	Conductivity	2320	2395	2470
	TDS	1986	2123.5	2261
	Sulfates	2467	2564	2661
8/19/2014	Flow (gpm)	174	175	176
	Conductivity	2460	2490	2520
	TDS	2433	2527	2621
	Sulfates	1247	1323	1399
9/16/2014	Flow (gpm)	178	179	180
	Conductivity	2250	2250	2250
	TDS	1792	1896	2000
	Sulfates	1170	1454	1737

WV0099392, 028				
date	parameter	min	avg	max
1/20/2014	Flow (gpm)	4.4	4.7	5
	Conductivity	911	954	997
	TDS	602	631.5	661
	Sulfates	385	470	555
2/24/2014	Flow (gpm)	64	75	86
	Conductivity	873	878	883
	TDS	595	605	615
	Sulfates	360	372	383
3/21/2014	Flow (gpm)	45	49	53
	Conductivity	939	988.5	1038
	TDS	684	745	806
	Sulfates	454	478.5	503
4/23/2014	Flow (gpm)	244	244	255
	Conductivity	1753	1802	1851
	TDS	1455	1496	1538

	Sulfates	997	1165	1333
5/22/2014	Flow (gpm)	28	29	30
	Conductivity	1135	1155	1175
	TDS	903	938	974
	Sulfates	600	639	678
6/17/2014	Flow (gpm)	60	61	62
	Conductivity	1092	1118	1144
	TDS	950	967	984
	Sulfates	446	541	636
7/17/2014	Flow (gpm)	14	37	60
	Conductivity	1283	1364	1445
	TDS	956	1079	1202
	Sulfates	1104	1215	1327
8/19/2014	Flow (gpm)	18	18	18
	Conductivity	1480	1505	1530
	TDS	1453	1482	1511
	Sulfates	640	678	717
9/16/2014	Flow (gpm)	20	20	20
	Conductivity	1116	1143	1170
	TDS	817	879	941
	Sulfates	472	632	792

WV0099392, 036				
date	parameter	min	avg	max
1/16/2014	Flow (gpm)	< 0.01	6	12
	Conductivity	983	983	983
	TDS	654	654	654
	Sulfates	333	333	333
2/17/2014	Flow (gpm)	14	14	14
	Conductivity	831	947.5	1064
	TDS	544	617	690
	Sulfates	313	419	525
3/18/2014	Flow (gpm)	14	14	14
	Conductivity	1036	1064.5	1093
	TDS	642	672	702
	Sulfates	408	433	458
4/01/2014	Flow (gpm)	<0.01	7	14
	Conductivity	794	794	794
	TDS	538	538	538
	Sulfates	235	235	235
5/16/2014	Flow (gpm)	<0.01	4	8

	Conductivity	1193	1193	1193
	TDS	887	887	887
	Sulfates	513	513	513
6/16/2014	Flow (gpm)	7	7.5	8
	Conductivity	1229	1246	1264
	TDS	944	974	1005
	Sulfates	426	538	650
7/17/2014	Flow (gpm)	0	0	0
8/01/2014	Flow (gpm)	0	0	0
9/04/2014	Flow (gpm)	0	0	0

WV0099392, 077				
date	parameter	min	avg	max
1/17/2014	Flow (gpm)	100	105	110
	Conductivity	864	897.5	931
	TDS	603	624	645
	Sulfates	391	396.5	402
2/17/2014	Flow (gpm)	120	125	130
	Conductivity	687	861	1035
	TDS	440	570.5	701
	Sulfates	325	784.5	1244
3/18/2014	Flow (gpm)	110	110	110
	Conductivity	961	972	983
	TDS	689	694.5	700
	Sulfates	478	800	1122
4/17/2014	Flow (gpm)	100	110	120
	Conductivity	796	896	997
	TDS	574	653	732
	Sulfates	385	453	521
5/16/2014	Flow (gpm)	100	100	100
	Conductivity	1034	1040	1046
	TDS	776	781	787
	Sulfates	477	618	759
6/17/2014	Flow (gpm)	90	95	100
	Conductivity	1007	1041	1076
	TDS	839	880	922
	Sulfates	392	507	622
7/16/2014	Flow (gpm)	100	100	100
	Conductivity	1047	1106	1165
	TDS	833	924	1015
	Sulfates	402	499	596

8/19/2014	Flow (gpm)	60	70	80
	Conductivity	1186	1191	1197
	TDS	965	990	1015
	Sulfates	913	952	992
9/16/2014	Flow (gpm)	100	100	100
	Conductivity	995	998	1001
	TDS	854	856	859
	Sulfates	465	465	465

WV0099392, 079				
date	parameter	min	avg	max
1/17/2014	Flow (gpm)	100	100	100
	Conductivity	2039	2133.5	2228
	TDS	953	1028.5	1104
	Sulfates	582	654.5	727
2/17/2014	Flow (gpm)	100	105	110
	Conductivity	1988	2013	2038
	TDS	1504	1513.5	1523
	Sulfates	527	769	1011
3/18/2014	Flow (gpm)	100	100	100
	Conductivity	2060	2150	2240
	TDS	936	1413.5	1891
	Sulfates	441	547	653
4/17/2014	Flow (gpm)	100	105	110
	Conductivity	2040	2205	2370
	TDS	1416	1457	1498
	Sulfates	1012	1029	1047
5/16/2014	Flow (gpm)	90	95	100
	Conductivity	2021	2025	2030
	TDS	1226	1227	1228
	Sulfates	383	565	748
6/19/2014	Flow (gpm)	90	95	100
	Conductivity	2028	2259	2490
	TDS	1568	1905	2242
	Sulfates	989	1067	1145
7/16/2014	Flow (gpm)	80	85	90
	Conductivity	2430	2560	2690
	TDS	1426	1903	2381
	Sulfates	930	1017	1105
8/19/2014	Flow (gpm)	50	60	70
	Conductivity	2046	2373	2700
	TDS	1424	1943	2463

	Sulfates	2059	2157	2255
9/16/2014	Flow (gpm)	90	95	100
	Conductivity	1986	2016	2046
	TDS	1185	1300	1414
	Sulfates	706	706	706

WV0099392, 084				
date	parameter	min	avg	max
1/3/2014	Conductivity	1534	1534	1534
	TDS	1002	1002	1002
	Sulfates	703	703	703
	Flow (gpm)	< 0.01	75	150
2/4/2014	No Flow			
3/5/2014	No Flow			
4/17/2014	Flow (gpm)	150	1046	1943
	Conductivity	1553	1614	1675
	TDS	764	785	806
	Sulfates	471	502	533
5/16/2014	Flow (gpm)	130	265	400
	Conductivity	2596	1689	1783
	TDS	665	1026	1387
	Sulfates	792	1036	1281
6/16/2014	Flow (gpm)	91	145	200
	Conductivity	1378	1542	1707
	TDS	1164	1271	1379
	Sulfates	566	799	1032
7/16/2014	Flow (gpm)	100	150	200
	Conductivity	1678	1729	1780
	TDS	759	1143	1527
	Sulfates	354	593	833
8/19/2014	Flow (gpm)	<.01	36	73
	Conductivity	1786	1786	1786
	TDS	1557	1557	1557
	Sulfates	708	708	708
9/16/2014	Flow (gpm)	500	850	1200
	Conductivity	1047	1142	1236
	TDS	904	971	1038
	Sulfates	525	755	985

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WV1020889, 003				
date	parameter	min	avg	Max
1/17/2014	Flow (gpm)	200	200	200
	Conductivity	1976	1977	1979
	TDS	1073	1355	1638
	Sulfates	826	1031	1236
2/17/2014	Flow (gpm)	200	215	230
	Conductivity	1379	1539	1699
	TDS	1011	1190	1370
	Sulfates	374	601	829
3/18/2014	Flow (gpm)	200	200	200
	Conductivity	1906	1973	2040
	TDS	1598	1660	1722
	Sulfates	1199	1238	1278
4/17/2014	Flow (gpm)	200	200	200
	Conductivity	1797	1892	1988
	TDS	1622	1669	1716
	Sulfates	1261	1293	1326
5/16/2014	Flow (gpm)	200	200	200
	Conductivity	1908	1957	2006
	TDS	1706	1711	1716
	Sulfates	713	962	1212
9/18/2014	Flow (gpm)	166	166	167
	Conductivity	1722	1881	2040
	TDS	1515	1606	1698
	Sulfates	1218	1262	1307
7/16/2014	Flow	175	175	175
	Conductivity	2090	2105	2120
	TDS	2018	2040	2062
	Sulfates	885	990	1096
8/20/2014	Flow (gpm)	150	158	165
	Conductivity	2190	2300	2410
	TDS	2054	2128	2202
	Sulfates	1147	1632	2116
9/18/2014	Flow (gpm)	166	166	167
	Conductivity	1722	1881	2040
	TDS	1515	1606	1698
	Sulfates	1218	1262	1307